Gestalt principles go toward complete explanation of all the characteristic vital processes? A very difficult question, to which at the present time a conclusive answer cannot, I think, be returned.

Perhaps some help towards the formation of an opinion on this question may be found by considering the principle in relation to the simpler forms of life. Does an amoeba look like- and behave like a physical *Gestalt* ? Watch its pseudopodia flowing out in various directions ; pursuing and accepting and enclosing nutritious particles, and rejecting all others; or see it conjugating with a similar amoeba, and thereafter dividing itself into two like parts. Especially is the unlikeness to *Gestalt* behaviour striking in the case of those protozoa allied to *Amoeba* which send out many long streaming pseudopodia. Or the *Vorticella,* shaped like a wine-glass with long contractile stem, with ciliated disc and mouth, and with its varied and, it would seem, intelligently adaptive behaviour, as described by H. S. Jennings and others ?

Consider the fact that the spermatozoan (the minute male gamete-cell whose nucleus and gene-supply are said to be identical with those of the female gamete-cell except for one small group of genes) is, as regards its small quantity of cytoplasm, specific in form for every species—manifests, that is to say, some definite hereditary structure. And the further fact that many species of single-celled organisms attain to astounding complexity of structure and multiplicity of organs. If all isolated cells were of spherical shape, like soap-bubbles, we might

apply the principle of physical *Gestalt* with more hope.

Again, consider the formation of the spicules of sponges, and the vast variety of ornate and regular spatial structure displayed by the firm tests or skeletons of the unicellular